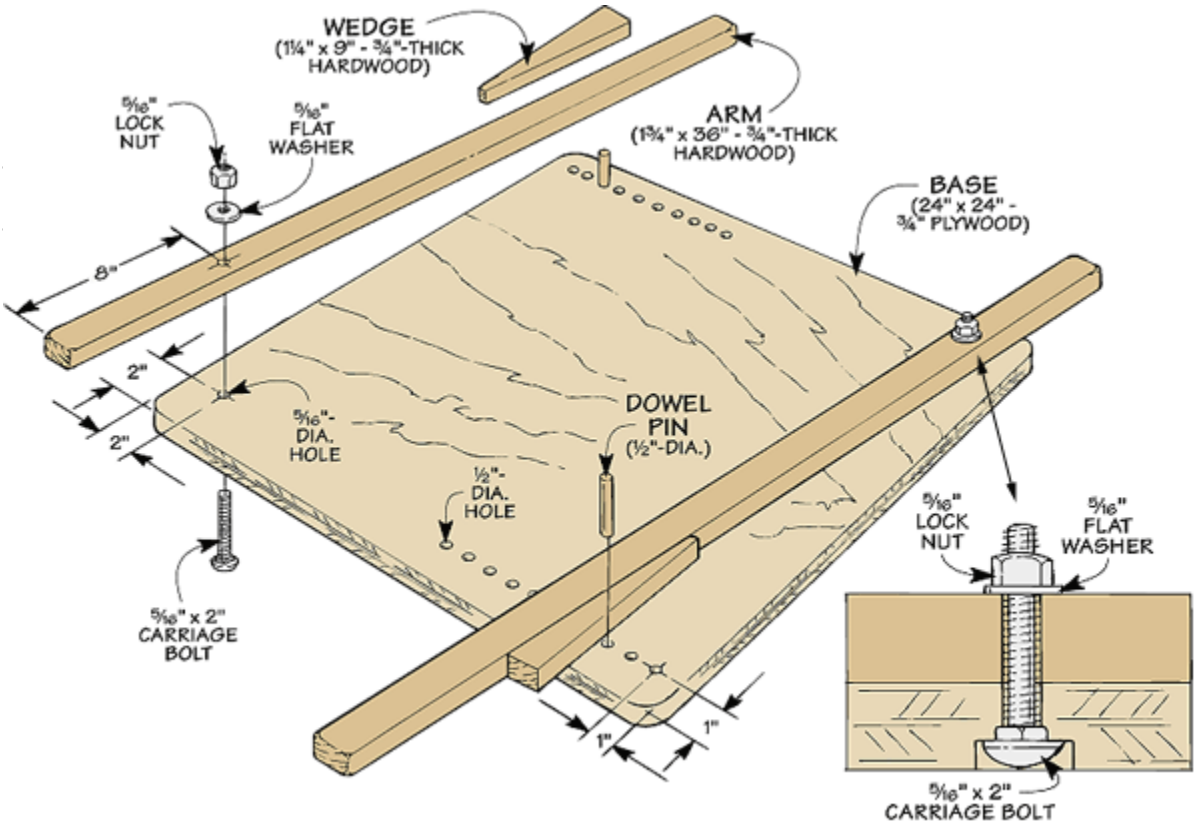
Clamping Jig for Panel Doors

When I decided to build a set of kitchen cabinets, I had to make and assemble about three dozen raised panel doors. Instead of using pipe or bar clamps for this task, I came up with my own clamping jig, see photo. This jig applies even pressure along the edges of the door and helps to keep it flat. And even though I used it for gluing up doors, it works just as well for gluing up flat panels.

The jig relies on wedges for clamping pressure. The door (or panel) is trapped between a couple of pivoting arms. Then wedges are driven in between the arms and a couple of dowel pins, creating a tight, even grip on the workpiece.

As you can see in the drawing below, there's really not much to the jig. Start by cutting out a square piece of plywood for the base. Then drill a row of holes along two edges of the jig, starting in opposite corners. (These will be for the dowel pins.) Next, drill a single, counterbored hole in each of the other two corners for the carriage bolts used to attach the arms, as shown in the detail drawing below. The arms are cut from narrow pieces of hardwood stock. After drilling a hole near one end of each arm, they can be attached to the base of the jig with carriage bolts, washers, and nylon lock nuts.